

REMARKS/ARGUMENTS

In the Office Action mailed May 16, 2007, claims 1-22 were rejected. Additionally, claims 14, 21, and 22 were objected to. In response, Applicant hereby requests reconsideration of the application in view of the amended claims and the below-provided remarks. No claims are canceled or added.

For reference, claims 14, 15, 21, and 22 are amended. In particular, claim 14 is amended to depend from claim 11, rather than claim 1, because claims 11 and 14 are drawn to a method. Claim 15 is amended to include a limitation related to a model storage resource. This amendment is supported by the specification, for example, by original claims 1 and 11, as well as in paragraph 44. Claims 21 and 22 are amended to refer to a computer readable storage medium, rather than an apparatus, since the corresponding parent claims are drawn to a computer readable storage medium.

Claim Rejections under 35 U.S.C. § 112

Claims 14, 21, and 22 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Applicant appreciates the Examiner's attention to the language of these claims, and respectfully submits that claims 14, 21, and 22 are amended according to the Examiner's recommendations. Accordingly, Applicant requests that the rejection of claims 14, 21, and 22 under 35 U.S.C. § 112, second paragraph, be withdrawn.

Claim Rejections under 35 U.S.C. §§ 102 and 103

Claims 1-6 and 15-20 were rejected under 35 U.S.C. § 102(b) as being anticipated by Gajjar et al. (U.S. Pat. Pub. No. 20020174306, hereinafter Gajjar). Additionally, claims 7-14, 21, and 22 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Schutzman et al. (U.S. Pat. Pub. No. 20030018656, hereinafter Schutzman) in view of Gajjar and further in view of Dalal et al. (U.S. Pat. Pub. No. 20040123063, hereinafter Dalal). However, Applicant respectfully submits that these claims are patentable over Gajjar, Schutzman, and Dalal for the reasons provided below.

Independent Claim 1

Applicant respectfully submits that claim 1 is patentable over Gajjar because Gajjar does not disclose all of the limitations of the claim. Claim 1 recites “a monitoring module configured to monitor a plurality of existing storage resources corresponding to a client, one of the plurality of existing storage resources designated as a model storage resource” (emphasis added). Claim 1 also recites “a provisioning module configured to provision a new storage resource for the client according to the modeling policy, the new storage resource modeled after the model storage resource” (emphasis added). However, Gajjar does not disclose monitoring a plurality of existing storage resources. Additionally, Gajjar does not disclose a model storage resource and modeling a new storage resource after the model storage resource.

In regard to monitoring a plurality of existing storage resources, the Office Action asserts that Gajjar purportedly discloses this limitation in paragraphs 7-9. However, the indicated paragraphs and the remainder of the disclosure of Gajjar do not disclose monitoring a plurality of existing storage resources. Gajjar merely describes allocating (or provisioning) storage to host computers based upon the needs of applications running on the host computers. Gajjar, paragraph 29, lines 1-3. In order to provision the storage to the host computers, a storage provisioning policy is created based on storage heuristic metadata, which are storage rules or constraints as a function of a storage attribute. Gajjar, paragraph 7, lines 1-7. In other words, the storage provisioning rules are developed based on application requirements and logical rules that are not disclosed as having a relationship with existing storage devices. Once the storage provisioning policies are in place, the storage provisioning policies are used to select new devices to be provisioned. Gajjar, paragraph 8, lines 1-7. Hence, Gajjar merely describes establishing a set of rules to create the storage provisioning policies, but does not describe monitoring existing storage resources to create the storage provisioning policies. In fact, Gajjar does not appear to disclose monitoring existing storage resources at all for any other purpose. Therefore, Gajjar does not disclose all of the limitations of the claim because Gajjar does not disclose monitoring a plurality of existing storage resources.

In regard to the model storage resource limitations, Gajjar also fails to disclose an existing storage resource designated as a model storage resource and modeling a new

storage resource after the model storage resource. Although the Office Action asserts that Gajjar purportedly discloses these limitations in paragraphs 7-9, which are discussed above, neither this portion nor the remainder of the disclosure of Gajjar describes a model storage resource and modeling a new storage resource after the model storage resource, as recited in the claim. In contrast, Gajjar merely describes establishing the storage provisioning policies based on the storage heuristic metadata, as described above. Moreover, even if the storage provisioning policies or the storage heuristic metadata were based on existing storage resources (which Gajjar does not appear to describe), Gajjar nevertheless does not disclose using an existing storage resource as a model storage resource. Additionally, Gajjar does not disclose modeling a new storage resource after the model storage resource, as recited in the claim, because Gajjar merely describes using the storage provisioning policies to select new storage devices for provisioning. Therefore, Gajjar does not disclose all of the limitations of the claim because Gajjar does not disclose a model storage resource and modeling a new storage resource after the model storage resource, as recited in the claim.

Since Gajjar does not disclose monitoring a plurality of existing storage resources, a model storage resource, or modeling a new storage resource after the model storage resource, as recited in the claim, Applicant submits claim 1 is patentable over Gajjar. Accordingly, Applicant respectfully requests that the rejection of claim 1 under 35 U.S.C. § 102(b) be withdrawn.

Independent Claim 11

Applicant respectfully submits that claim 11 is patentable over the combination of cited references at least for similar reasons to those stated above in regard to the rejection of independent claim 1. Claim 11 recites “a storage resource manager server configured to monitor a plurality of existing storage resources corresponding to the client and to provision a new storage resource for the client according to a modeling policy, the new storage resource modeled after a model storage resource” (emphasis added).

Here, although the language of claim 11 differs from the language of claim 1 and the scope of claim 11 should be interpreted independently of claim 1, Applicant respectfully asserts that the remarks provided above in regard to the rejection of claim 1

apply also to the rejection of claim 11. In particular, Gajjar does not disclose monitoring a plurality of existing storage resources, a model storage resource, or modeling a new storage resource after the model storage resource, as recited in the claim.

Moreover, the combination of Gajjar with the other cited references does not cure the lack of disclosure by Gajjar because the other cited references do not teach the indicated limitations, and the Office Action does not assert that the limitations might be taught or suggested by the other cited references. Accordingly, Applicant respectfully submits claim 11 is patentable over the combination of cited references and requests that the rejection of claim 11 under 35 U.S.C. § 103(a) be withdrawn.

Independent Claim 15

Applicant respectfully asserts independent claim 15 is patentable over Gajjar at least for similar reasons to those stated above in regard to the rejection of independent claim 1. In particular, claim 15 recites “monitoring a plurality of existing storage resources corresponding to a client, wherein one of the plurality of existing storage resources is designated as a model storage resource” (emphasis added). Claim 15 also recites “provisioning a new storage resource for the client according to the storage provisioning policies, the new storage resource modeled after one of the plurality of existing storage resources” (emphasis added).

Here, although the language of claim 15 differs from the language of claim 1 and the scope of claim 15 should be interpreted independently of claim 1, Applicant respectfully asserts that the remarks provided above in regard to the rejection of claim 1 also apply to the rejection of claim 15. Therefore, Applicant respectfully asserts claim 15 is patentable over Gajjar because Gajjar does not disclose monitoring a plurality of existing storage resources, a model storage resource, or modeling a new storage resource after one of the existing storage resources, as recited in the claim. Accordingly, Applicant respectfully requests that the rejection of claim 15 under 35 U.S.C. § 102(b) be withdrawn.

Dependent Claims 2-9, 12-14, and 16-22

Given that claims 2-9, 12-14, and 16-22 depend from and incorporate all of the limitations of the corresponding independent claims 1, 11, and 15, which are patentable over the cited references, Applicant respectfully submits that dependent claims 2-9, 12-14, and 16-22 are also patentable over the cited references based on allowable base claims. Additionally, each of claims 2-9, 12-14, and 16-22 may be allowable for further reasons, as described below. Accordingly, Applicant requests that the rejections of claims 2-6 and 16-20 under 35 U.S.C. § 102(b) and the rejections of claims 7-10, 21, and 22 under 35 U.S.C. § 103(a) be withdrawn.

In regard to claims 3-6, 9, 14, 17-20, and 22, Applicant respectfully submits claims 3-6, 9, 14, 17-20, and 22 are patentable over the cited references because the cited references do not disclose or teach all of the limitations of the claims. Each of the indicated claims recites one or more limitations related to at least one of the following: a storage location, a storage server, a storage pool, and a model group. Although the Office Action relies on Gajjar as purportedly teaching these limitations, the cited portion of Gajjar (paragraphs 7-9 and 23-24) merely describe storage provisioning policies (paragraphs 7-9), in general, and particular types of physical storage devices (paragraphs 23-24). While the general explanation of the storage provisioning process may be useful to explain how storage devices are provisioned in the implementation of Gajjar, the general description of the storage provisioning process does not disclose the specific limitations related to a storage location, a storage server, a storage pool, and a model group, as recited in the indicated claims. Similarly, the list of different types of physical storage devices may provide exemplary physical storage devices used in the implementation of Gajjar, but the list of physical storage devices does not describe a storage location, a storage server, a storage pool, or a model group, as recited in the indicated claims. Therefore, the cited references do not disclose or teach all of the limitations of claims 3-6, 9, 14, 17-20, and 22 because Gajjar does not describe a storage location, a storage server, a storage pool, or a model group, as recited in the claims.

CONCLUSION

Applicant respectfully requests reconsideration of the claims in view of the amendments and remarks made herein. A notice of allowance is earnestly solicited. If the Examiner believes a telephone interview would expedite the prosecution of this application, the Examiner is invited to contact the attorney listed below

Respectfully submitted,

Date: August 16, 2007

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